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35. ADDITIONAL HOST SPECIES FOR *LORANTHUS* AND THEIR LOCALITIES IN THANJAVUR DISTRICT, TAMIL NADU

The phorophytes or host trees in dry evergreen forest provide ideal habitats for epiphytic orchids and semiparasitic plants. *Sapindus emarginatus*, *Diospyros ferrea* and *Borassus flabellifer* are common phorophytes. *Cymbidium aloifolium*, *Vanda spathulata* and *V. tessellata* are the epiphytic orchids in Thanjavur district.

Dendrophthoe falcata, *Viscum orientale* and *V. capitellatum* are the destructive semi-parasites found on a number of plants. According to Singh (1963),

319 species of plants are attacked by these parasites in India. Balasubramanian *et al.* (1986) reported 29 host species in Point Calimere, Thanjavur dt. We found an additional 22 new host species for this parasite in Thanjavur district as a result of a 3 year study. The complete list of host plants from this district is presented in Table 1.

The host species that are new records for India are marked with an asterisk and plus mark denotes double parasitism. One species being parasitic on

TABLE 1

LIST OF HOST SPECIES FOR *Loranthus* AND THEIR LOCALITIES

<i>Acacia leucophloea</i> Willd. (Manakkal)	* <i>Ehretia pubescens</i> Benth. (Melathottum)
<i>Aegle marmelos</i> (L.) Corr. (Vallum)	* + <i>Excoecaria agallocha</i> L. (Pazhayar)
<i>Alangium salviifolium</i> (L.f.) Wang. (Peravurani)	<i>Ficus benghalensis</i> L. (Kodiakkarai RF)
* <i>Albizia amara</i> (Roxb.) Boivin (Peravurani)	* <i>F. racemosa</i> L. (Mailaduthurai)
<i>A. lebbeck</i> (L.) Benth. (Kodiakkarai)	<i>F. religiosa</i> L. (Kodiakkarai RF)
* <i>Anacardium occidentale</i> L. (Avanam)	<i>Gmelina asiatica</i> L. (Pazhayar)
<i>Artocarpus heterophyllus</i> Lam. (Mailaduthurai)	<i>Grewia rhamnifolia</i> Heyne ex Roth. (Poompuhar)
* <i>Azadirachta indica</i> Juss. (Ammapet)	* <i>Hugonia mystax</i> L. (Kodiakkarai RF)
* <i>Bombax ceiba</i> L. (Melathottum)	+ <i>Ixora pavetta</i> Andr. (Kodiakkarai RF)
<i>Cadaba fruticosa</i> (L.) Druce (Peravurani)	* <i>Jatropha curcas</i> L. (Kallimedu)
* <i>Calophyllum inophyllum</i> L. (Velankanni)	+ <i>Lannea coromandelica</i> (Houtt.) Merr. (Kodiakkarai RF)
<i>Canthium parviflorum</i> Lam. (Kodiakkarai RF)	+ <i>Lepisanthes tetraphylla</i> (Vahl) Radlk. (Periakuthakai)
* <i>Carmona retusa</i> (Vahl) Masam. (Melathottum)	+ <i>Manilkara hexandra</i> (Roxb.) Dubard (Kodiakkarai RF)
<i>Cassia fistula</i> L. (Kodiakkarai RF)	+ <i>Mangifera indica</i> L. (Ammapet)
<i>C. roxburghii</i> DC. (Kodiakkarai RF)	<i>Maytenus emarginata</i> (Willd.) Ding Hou (Kodiakkarai RF)
<i>C. siamea</i> Lam. (Melathottum)	<i>Memecylon edule</i> Roxb. (Kodiakkarai RF)
<i>Casuarina litorea</i> L. (Pazhayar)	* + <i>Mimusops elengi</i> L. (Ammapet)
<i>Catunaregam spinosa</i> (Thunb.) (Tirven.) (KRF)	* <i>Morinda pubescens</i> J.E. Smith (Melathottum)
<i>Carissa spinarum</i> L. (Kodiakkarai RF)	+ <i>Pithecellobium dulce</i> (Roxb.) Benth. (Kodiakkarai RF)
<i>Cissus vitifolia</i> L. (Kodiakkarai RF)	+ <i>Pongamia pinnata</i> (L.) Pierre (Kodiakkarai RF)
+ <i>Commiphora caudata</i> Engl. (Kodiakkarai RF)	<i>Prosopis chilensis</i> (Molina) Stuntz. (Manakkal)
<i>Cordia obliqua</i> Willd. (Kodiakkarai RF)	* <i>Rhizophora apiculata</i> Blume (Pazhayar)
<i>Crateva adamsonii</i> DC. (Rajamadam)	* + <i>Salvadora persica</i> L. (Kodiakkarai RF)
* <i>Dalbergia sissoo</i> Roxb. (Aduthurai)	<i>Salix tetrasperma</i> Roxb. (Sirkazhi)
<i>Dichrostachys cinerea</i> W. & A. (Kodiakkarai RF)	<i>Scutia myrtina</i> (Burm. f.) Kurz. (Kodiakkarai RF)

another parasite of the same or allied genera (Saxena 1971) were also recorded. *Viscum capitellatum*, parasitic on *D. falcata* was in turn parasitic on other species of plants.

The economically valuable tree species such as *Albizia lebbeck*, *Anacardium occidentale*, *Artocarpus heterophyllus*, *Bombax ceiba*, *Cassia siamea*, *Casuarina litorea*, *Dalbergia sissoo*, *Ficus religiosa*, *Manilkara hexandra*, *Mangifera indica*, *Pithecellobium dulce*, *Salvadora persica*, *Syzygium cumini*, *Tectona grandis*, *Terminalia catappa*, *Thespesia populnea* are severely affected by the parasite *D. falcata*, with many trees in and around

this district being heavily infected.

The parasite is a prolific producer of fruits, avidly devoured by some species of frugivorous birds that disperse the seeds of *D. falcata*.

No effective control measures are presently available. Diesel or powerine oil (30-50%) is sprayed on *D. falcata* to reduce its growth (Singh 1963). Its spread in Thanjavur forests will be disastrous considering the wildlife wealth.

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36. *VETIVERIA LAWSONI* (HOOK. F.) BLATTER & MCCANN AND *POTAMOGETON CRISPUS* L. — ADDITIONS TO THE FLORA OF ANDHRA PRADESH

During the course of intensive plant exploration in Nizamabad district of Andhra Pradesh, we collected two uncommon taxa. These taxa were identified as *Vetiveria lawsoni* (Hook. f.) Blatter & McCann (family Poaceae) and *Potamogeton crispus* L. (family Potamogetonaceae). The former taxon has so far been reported from Maharashtra, Karnataka and Tamilnadu (Blatter and McCann 1935, Fischer 1934) and the latter taxon was reported for the first time by Mathew (1982) from Tamilnadu as a new record for south India. Hence the present report of the occurrence of these taxa in Nizamabad district is interesting from the phytogeographical point of view and extends their distribution to Andhra Pradesh in south India.

Vetiveria lawsoni (Hook. f.) Blatter & McCann in *J. Bombay nat. Hist. Soc.* 32: 409. 1928; C. Fischer, *Fl. Pres. Madras* 3: 1201. 1957; Bor, *Grass. Bur. Ceyl. Ind. Pak.* 208. 1960. *Andropogon lawsoni* Hook. f., *Fl. Brit. India* 7: 187. 1896.

Perennial; root stock horizontal; culms to 1.2 m long, nodes distant. Leaves chiefly radical, 7-20 x

0.3-0.6 cm, rigid, subglabrous, apex acute-obtuse, margins ciliate; sheaths striate, to 12 cm. Inflorescence of 15-22 cm long panicle; racemes whorled. Sessile spikelets lanceolate, to 4 mm long, callus with silky hairs, upper glume awned, keel pectinately ciliate; lemma ciliate, obtusely 2-dentate. Pedicelled spikelets male, lanceolate, to 5 mm long, callus naked; stamens 3. Grains oblong, slightly oblique at top.

Flowering and fruiting: August - March.

Distribution: Nizamabad: Common in sandy localities throughout the district. INDIA: Maharashtra, Karanataka, Tamil Nadu.

Specimens examined: Chanapur, BR 7112; Jalalpur RF, BR 9564.

This taxon can be easily distinguished from the common species of *Vetiveria*, *V. zizanioides* (L.) Nash in having horizontal rootstock, leaves and panicles not exceeding 20 cm in length.

Potamogeton crispus L., *Sp. Pl.* 126. 1753; Hook. f., *Fl. Brit. India* 6: 566. 1983; Cooke in *Fl. Pres. Bombay* 350. 1908; Burkill, *Rec. Bot. Surv.*